Halibut Liver Oil

Product Summary:
Halibut Liver Oil is an excellent source of preformed vitamins A and D as well as omega-3 fatty acids. Vitamin A is a fat-soluble vitamin necessary for the health and protection of eyesight, skin and membranes. Both vitamins A and D contribute to the normal development and maintenance of bones and teeth.

Properties/Uses:
The claim as approved by the Natural Health Products Directorate (NHPD): A factor in the maintenance of good health. Helps in the development and maintenance of bones, teeth and night vision. Helps maintain eyesight, skin, membranes and immune function.
Pharmacology:

Halibut liver oil differs from fish oil and omega-3 supplements as it also contains natural vitamins A and D. Halibut liver oil typically contains higher amounts of vitamins A and D than cod liver oil. The omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) cannot be manufactured in the body and must be consumed in our diets, which is why they are called “essential” fatty acids. Omega-3 can significantly reduce the risk of heart disease, promote healthy levels of blood triglycerides, and have anti-inflammatory qualities. Furthermore, they help maintain cardiovascular health, support cognitive health and brain function, and play a role in normal growth and development. Research shows that omega-3 fatty acids EPA and DHA are critical for overall physical, emotional and mental health. While fish liver oils contain omega-3s, they should not be relied upon as a source of omega-3, as they contain high amounts of vitamin A.

Vitamin A helps form and maintain healthy teeth, skeletal and soft tissue, mucous membranes, and skin. It improves healing by stimulating the immune system. Vitamin A also promotes good vision, especially in dim light. Cod liver oil contains vitamin A in its most active retinol form, which is the most form found in animals. The preformed vitamin A is easier for people with digestive disorders to absorb. The less active carotenoid form is found in vegetables.

Vitamin D, “the sunshine vitamin”, promotes the body’s absorption of calcium, which is essential for the normal development and maintenance of healthy teeth and bones. Calcium is also important to nerve tissues, including the brain. Vitamin D also helps maintain adequate blood levels of calcium and phosphorus. Vitamin D has also been reported to lower the risk of upper respiratory tract infections and even certain cancers and vitamin D is concentrated in the liver of fish making cod liver oil a good source of vitamin D.
Manufactured product information:

**Manufacturer:**
WN Pharmaceuticals® Ltd.

**Size/UPC:**
250's ............................................................... 7 77747 10308 9

**NPN:**
02245309

**Expiry Date:**
36 months from date of manufacture

**Active Ingredient:**
Each softgel contains:
- Vitamin A* (palmitate) ........................................ 1511 mcg RAE (5000 IU)
- Vitamin D (ergocalciferol) ........................................ 10 mcg (400 IU)

*From Halibut Liver Oil

**Non-Medicinal Ingredients (in descending order):**
Soybean oil, softgel capsule (gelatin, glycerin, purified water), vitamin E.

**Appearance:**
Clear yellowish oil encapsulated in a size 3 round clear soft gelatin shell.

**Packaging:**
300 cc white round bottle with safety seal under a 45 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on the label applied to the exterior of the bottle.

**Storage:**
Keep at room temperature in a dark, dry place.
Dose:
According to the NHPD, the daily-recommended adult dose for vitamin A is 216-10,000 IU/d and 0.8-25 mcg (32-1000 IU) for vitamin D.\textsuperscript{1} The tolerable upper intake for vitamin A is 10,000 IU/d for adults.\textsuperscript{1}

Directions:
(Adults): 1 softgel daily or as recommended by a physician.

Caution:
The caution as approved by the Natural Health Products Directorate (NHPD): KEEP OUT OF THE REACH OF CHILDREN. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Deficiency Symptoms:
It is recognized that the human body requires a large variety of nutritional substances necessary for optimal growth and development. A deficiency in omega-3 can lead to a host of health issues including cardiac and circulatory disorders, disorders of the skin (eczema), disorders of the kidneys and liver, with various inflammatory problems, arthritis, weight disorder and failure of the immune system. Symptoms of vitamin A deficiency include dry eyes and night blindness. Vitamin A deficiency is common in alcoholism.\textsuperscript{2} Vitamin D deficiency in adults can lead to osteomalacia or rickets in children.\textsuperscript{3}

Drug Interactions/Contraindications:

\textit{Vitamin A}

The drugs cholestyramine (Questran), colestipol (Colestid), neomycin (Neo-Fradin), and orlistat (Xenical), as well as mineral oil, all interfere with the absorption of vitamin A.\textsuperscript{2}

Note that increased risk of vitamin A toxicity can result if higher dosages of cod liver oil are taken at the same time as synthetic vitamin A derivatives such as tretinoin (Accutane) and etretinate (Tegison).\textsuperscript{4}

Advise patients taking retinoids to avoid vitamin A supplements.\textsuperscript{2}
Do not exceed 5000 IU vitamin A during pregnancy.\textsuperscript{2,4}

High doses of vitamin A (>10,000 IU) could increase the risk of bleeding with warfarin.\textsuperscript{2}

**Vitamin D**

Bile acid sequestrants like Cholestyramine, corticosteroids, Dilantin, barbiturates, Phenobarbital, etidronate, tuberculosis drugs, Olestra and mineral oil interfere with vitamin D absorption and/or metabolism.\textsuperscript{3}

**Fish Oils**

Those taking fish oils should also supplement with natural vitamin E to reduce the risk of fatty acid peroxidation. Fish liver oils supply omega-3 eicosapentaenoic acid (EPA), which could affect the prothrombin time, related to anticoagulant therapy, or in the case of high doses, of ASA. Contraindicated in those with poor anticoagulation control.\textsuperscript{5}

**Toxicity/Adverse Reactions:**

Fish oils have Generally Recognized As Safe status in the US. When taken orally, cod liver oil may have a fishy taste and might cause belching, nosebleeds, halitosis, and heartburn.\textsuperscript{5}

Do not supplement with cod liver oil without consulting a physician if you suffer from cirrhosis of the liver, hepatitis, or any other serious liver disorder. At recommended levels in people with normal liver function, vitamin A is not associated with any side effects. Vitamin A toxicity can occur when vitamin A intake exceeds the storage capacity of the liver or when liver function is compromised. Excessive vitamin A intake can have a negative effect on bone.\textsuperscript{2}

Pregnant women and women of childbearing age who may possibly become pregnant should not take more than 5000 IU of vitamin A daily due to the risk of birth defects. Lactating women should also not take more than 5000 IU of vitamin A per day.\textsuperscript{4}
**Allergen Content/Ingredient Sensitivity:**

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**NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:**

- Free of animal products
- Kosher
References:


Revision #: 00